A SHOPPER'S GUIDE FOR BEEF

BUYING
STORING
COOKING

IOWA STATE UNIVERSITY of Science and Technology
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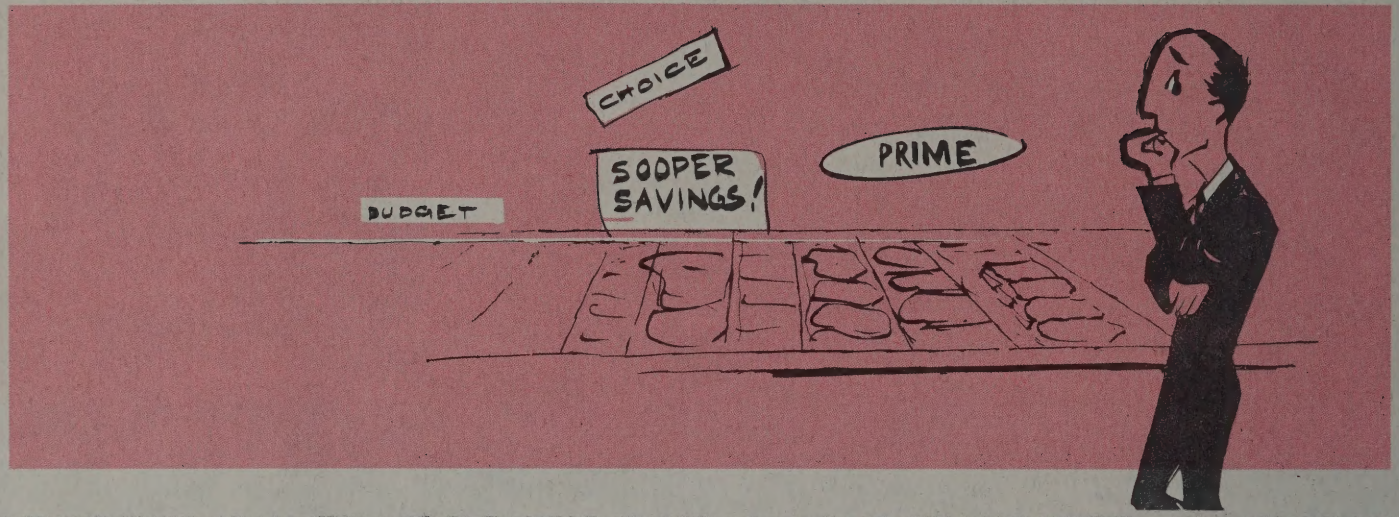

Over by the meat counter, licking his chops, is Mike—on his way home with steaks on his mind. The trouble is, he's frustrated.

As a car buyer, Mike knows the ropes—right down to the last nut and bolt. Get bit? Buy a lemon? Not in a million years. But when it comes to bargaining for beef, he's a fish out of water.

Then along comes Jim, also headed home with steaks on his mind. But Jim knows what he's doing. He often buys meat for the family, especially for special occasions and backyard barbecues.

I'm stumped, Mike moans. I know a good steak when I bite into one, but how can I tell a quality steak when I buy it?

Prepared by Robert E. Rust, extension meats specialist.

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Jim: Okay, here are some pointers. First, I look for the shield-shaped stamp on every package. It tells the government grade and gives you a lead on quality.

Let's take the grades one at a time.

U. S. PRIME

U.S. Prime beef is the top grade. It's restaurant and hotel beef mostly, and you won't often find it in stores. It costs more than most folks want to pay.

Why does it cost so much?

Because it comes from cattle which have been carefully fed for a long time to produce very high-quality beef. This kind of meat costs top money to produce. It usually has a good covering of fat plus a lot of marbling which makes it flavorful and juicy. But there's more waste too, since most folks don't eat the outside fat.

U. S. CHOICE AND U. S. GOOD

The U. S. Choice stamp means this beef comes from a young animal with just the right amount of fat. This is the grade for you if you want high-quality, tender meat. Just down the quality scale is U. S. Good beef. These cuts please the thrifty shopper because they have little fat. In other

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words, they're mostly "eatin' meat"—less juicy than "choice" beef, but still fairly tender.

BUDGET BEEF

Say, Jim, what's this "budget" or "economy" beef I see in some stores?

That's probably U. S. Standard grade beef. If you've noticed, it has little or no marbling and only a very thin covering of fat. It usually comes from animals that weren't lucky enough to be corn-fed. It's apt to be more dry when cooked and less tender than the top grades.

You mentioned "marbling." Could you explain that?

Sure, Mike. Marbling refers to these little white flecks of fat throughout the lean. It indicates flavor and juiciness. Be sure to look for it in cuts you want roasted, broiled or pan-broiled. Since the U. S. Standard grade, or budget beef, has little or no marbling, all but the most tender cuts need to be braised or cooked in liquid to insure juiciness.

That gives us *Prime, Choice, Good* and *Standard* grades—in that order.

OTHER GRADES

There are two other grades—U. S. Commercial and U. S. Utility—but we're not likely to find them in our stores except as ground beef. These grades come from older animals, and the meat is usually less tender. Here's an interesting point, though—beef of all grades is just about equal nutritionwise.

BUYING UNGRADED BEEF

Is all beef in our stores government graded, Jim?

No, only about half of it.

But how can I tell the quality of beef that's not graded?

You can tell a lot about beef by looking at it—if you know what to look for. We talked about *marbling* earlier. That's one important thing.

Check the *color* of the lean meat, too. It's a clue to the age of the animal and also to tenderness. A bright, cherry-red color means the beef comes from a young animal. Darker, purplish-colored beef comes from an older animal—and the old-timers are a bit less tender.

I've noticed that frozen beef always looks dark. Does this mean it's from an old animal?

Not necessarily. All beef turns darker during freezing, but this doesn't affect quality.

Let's see—color and marbling. Any other "meat signs" I can follow?

Sure, look at the cut surfaces of the bones. If these surfaces are red and porous, the beef comes from a young animal. If they look hard and flinty, you can be reasonably sure the meat has seen a lot of seasons.

Recent research at Iowa State University has shown that beef from young animals is the best in flavor, juiciness and tenderness. Look for young beef if you want to be assured of top quality.

Fat is another clue to quality. All beef contains some fat, both on the outside of the meat and between muscle groups. Look for fat that's hard and brittle, not soft and oily.

What about yellow fat, Jim? Does this indicate anything about quality?

Not necessarily. Beef with yellow fat is just as good as beef with white fat, if it's the same grade and is equal in other ways. Feeding or breeding determines fat color.

FRESH BEEF SPARKLES

How do I know if the beef I'm getting is really fresh?

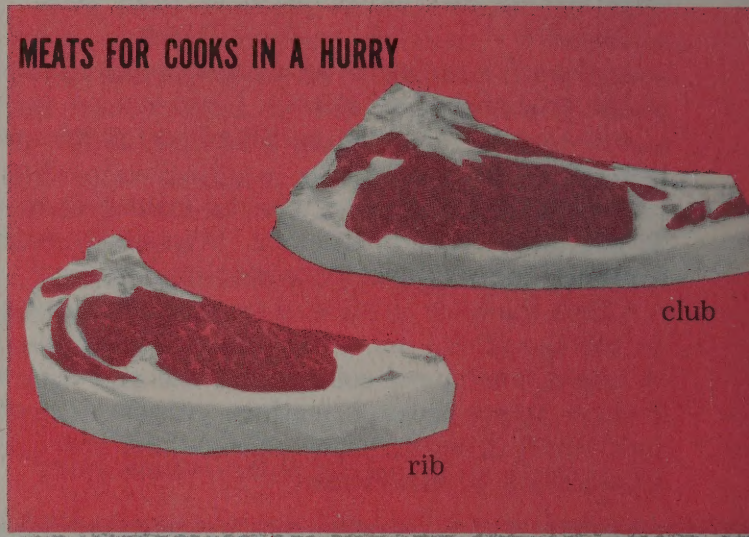
That isn't much of a problem today, Mike. Fresh beef moves fast. It's usually only a few days from the time an animal is slaughtered until the beef appears in the stores.

You might keep in mind, though, that fresh meat is bright and it sparkles. You won't see any dark, dried-looking spots. And when you unwrap a package, it smells fresh and clean.

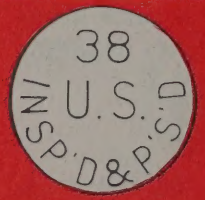
SAFETY INSPECTED BEEF

Jim, what's this little round stamp that says "U. S. Insp'd & P'S'D"? Is this another grade indicator?

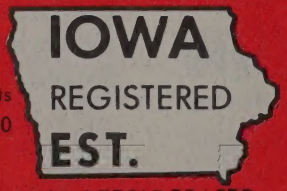
No, that's the federal inspection stamp. It tells you the meat is wholesome and safe to eat, but indicates nothing about quality.



federal inspection stamp



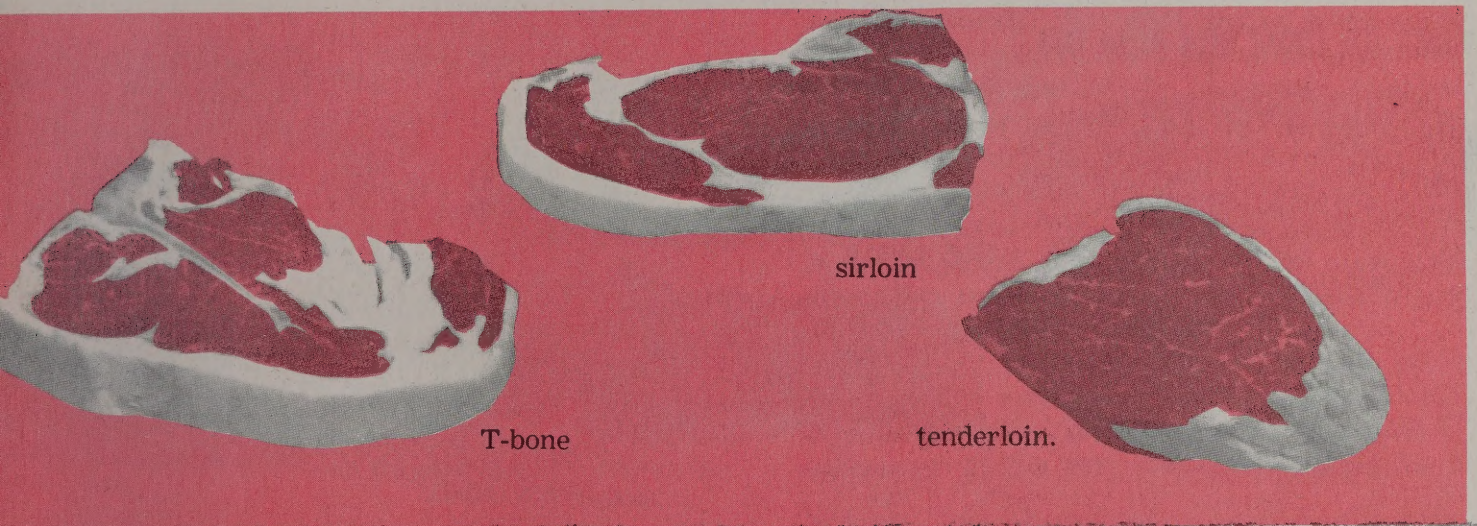
Inspection stamp for Iowa plants slaughtering less than 20,000 pounds per year



KEEP REFRIGERATED

Inspection stamp for Iowa plants slaughtering in excess of 20,000 pounds per year.

KEEP REFRIGERATED

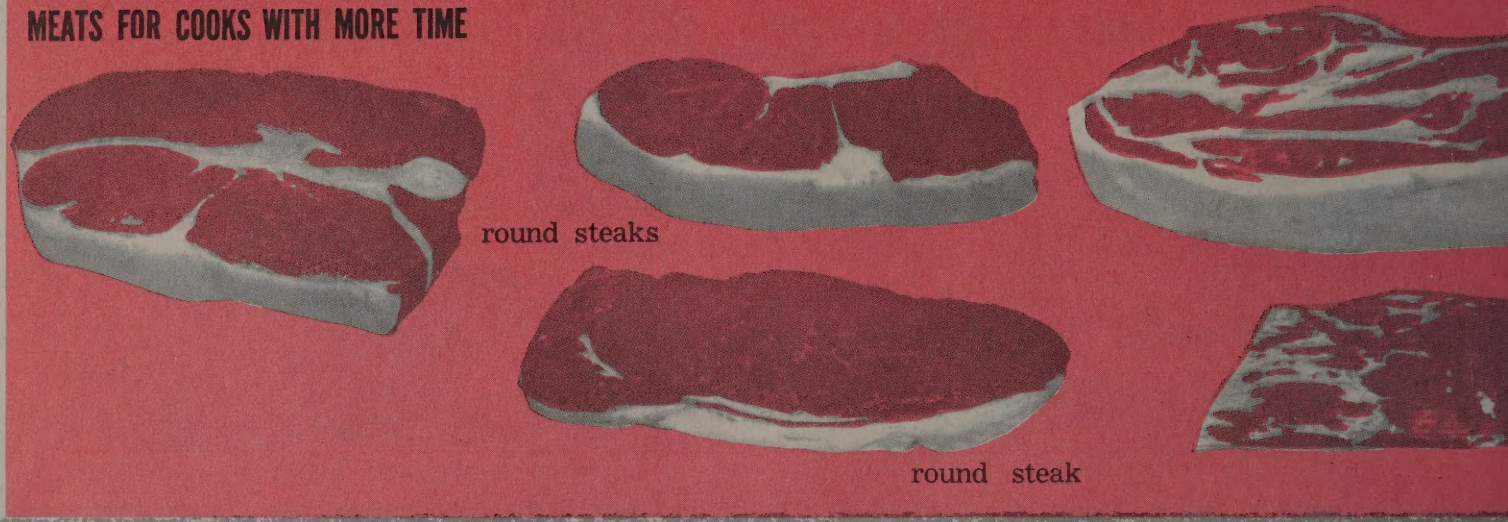


Is federal meat inspection the only assurance we have of wholesomeness?

No, since July 1, 1966, all beef slaughtered for resale in Iowa must be processed under the Iowa meat inspection regulations. Beef processed under these regulations will be stamped with a purple stamp in the shape of the state of Iowa.

Whoops! I've got to buy my steak—intelligently now—and run, Jim. My wife has a meeting tonight. Thanks a million—you've been a big help.

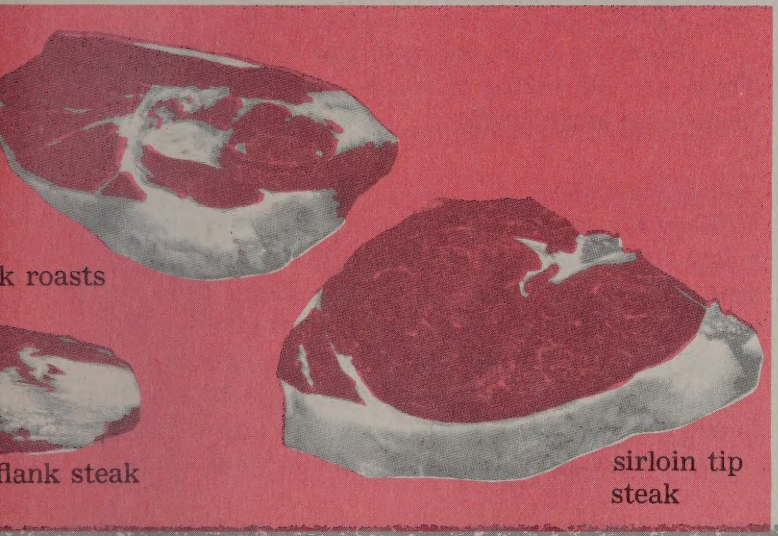
MEATS FOR COOKS WITH MORE TIME



Yes, Mike's wife, Alice, is always in a hurry. If it isn't one meeting, it's another — or some community project she has a knack for attracting. So Alice wants fast-cooking meats. For on-the-spot, economical meals she buys and serves ground beef or tenderized steaks (cube steaks).

She also likes to serve the more tender steaks of other types—the rib, club, T-bone or porterhouse, sirloin and tenderloin. These are more expensive than other cuts, but saving time is sometimes more important than saving money.

When Alice wants to broil or pan-broil the cuts



mentioned above, she looks for beef from a young animal with plenty of marbling. She chooses U. S. Choice or possibly U. S. Prime steaks. She skips the U. S. Good cuts here, since these might not be tender enough cooked this way.

Jim's wife, Barbara, on the other hand, has more time to cook—for a family that likes a wide variety of meats. She often chooses lower grade beef cuts that require slow cooking, but make good eating when tenderized with moist heat. She uses the less tender round steaks (Swiss steaks are ideal), chuck roasts (her favorite for pot roasts), flank steaks and sirloin tip steaks.

Barbara knows the less tender cuts usually are most economical—especially in summer when backyard chefs prefer the higher priced quick-cooking steaks for the grill.

For special occasions, Barbara likes to serve standing rib and higher-quality rump roasts. Because of their size, these take a long time to cook—even by dry heat. She expects to pay more for these tender roasts, since they normally stay in great demand.

HOW MUCH BEEF MAKES A MEAL?

Barbara decides how much beef to buy for her family according to the amount of fat and bone in the cut. She knows amounts vary from teen-

ager to toddler, but they average out. Here's her planning guide:

1. For boneless meat, or meat with a small amount of waste, 1 pound serves 3 to 4 people. Examples — round steak, stew meat, boneless steak, ground beef.

2. For meat with a moderate amount of waste, 1 pound serves 2 people. Examples—chuck roasts, rib roasts, T-bone, rib and club steaks.

3. For meat with a large amount of waste, 1 pound serves 1 person. Examples—short ribs, cross-cut shanks.

WHAT ABOUT MEAT THICKNESS?

Barbara and Jim are also particular about the thickness of the meat cuts they bring home. If a cut is too thin, it dries out too much during cooking.

So look for:

. . . Steaks at least 1 inch thick. If a steak is too large for one serving, carve it into individual portions after cooking.

. . . Chuck roasts 2 to 3 inches thick.

. . . Standing rib roasts with 2 to 3 ribs per roast. These are big pieces of meat—best for company meals or a large family.

GIVE BEEF GOOD CARE

When it's fresh: Alice usually uses beef within a few days after she buys it. She unwraps it as soon as she gets home from the store, then re-wraps it loosely so some air can circulate. She stores it in the coldest part of her refrigerator.

. . . But she freezes ground beef unless she's going to use it within a day or two. It's very perishable.

Sometimes Alice keeps beef for a week or two in her refrigerator freezer compartment. It keeps well for this short length of time, but the temperature is not cold enough for longer storage. *Rule to remember:* Always wrap beef in a good freezer wrapping material, even for short-time storage.

When it's frozen: Barbara wouldn't be without her home freezer, although the commercial locker

plant is just as good for long-time storage. She knows most frozen beef will keep about 12 months at zero degrees Fahrenheit or below—if properly wrapped.

. . . But she doesn't keep ground beef more than 3 months.

"First in, first out" is the rule Barbara follows. She knows beef quality deteriorates gradually and steadily during storage. She labels each package with the name of the cut and the date it was frozen.

And Barbara freezes meat in "family-size" packages. This way she doesn't have to thaw and prepare more than she needs at any one time. She always keeps an "instant" supply of hamburger patties on hand, frozen with freezer wrap separating them. They cook quickly without thawing first.

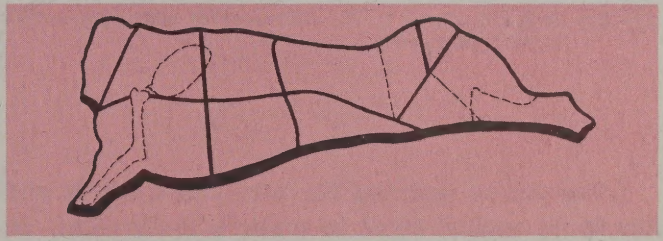
TO THAW OR NOT TO THAW

Sometimes Barbara thaws beef before cooking it; other times she cooks it directly from the freezer. She knows it ends up about the same either way, except that frozen meat may spatter more during cooking. It's all a matter of time—can you wait for defrosting, or are you in a hurry?

FIGURE ALL THE ANGLES

When Jim and Barbara buy a side of beef—as they do occasionally — they realize they aren't getting all steaks. They know they have to take the less desirable cuts along with the ones they like best.

When you figure the cost of having your own meat supply, be sure to include the *processing costs* and the *costs to buy and operate* your home freezer, as well as the cost of the meat itself.



Here's what you can expect from each 100 pounds of carcass beef:

Cut	Pounds
Chuck roast	17
Rib roasts or steaks	6½
Short ribs	1½
Club steaks	1
T-bone and porterhouse steaks	5
Sirloin steaks	5½
Sirloin tip roasts or steaks	3½
Boneless rump roast	3
Round steak	8½
Heel of round pot roast	2
Flank steak	½
Ground beef and stew	18½
Waste bone and fat	27½

(Note: A 1,000-pound U. S. Choice steer averages a 600-pound carcass.)

COOK IT RIGHT

After you've selected the beef you want, it still has to be cooked right to make a tasty meal. In general, use dry heat for tender cuts; moist heat for tough cuts. The chart on page 14 gives you the proper cooking methods for each cut and grade.

TENDER CUTS AND DRY HEAT METHODS

. . . First, refer to the chart for meat cuts to prepare by these methods. Then:

1. *To broil*—Set oven regulator for broiling. Place meat 2 to 3 inches from heat. Broil until top of meat is brown. Season with salt and pepper. Turn and cook until done. Season and serve at once.

2. *To pan-broil*—Place meat in heavy frying pan. Do not add fat or water. Do not cover. Cook slowly, turning occasionally. Pour fat from pan as it accumulates. Brown meat on both sides. Season and serve at once.

3. *To pan-fry*—Brown meat on both sides in small amount of fat. Season with salt and pepper. Do not cover. Cook at moderate temperature until done, turning occasionally. Serve at once.

4. *To roast*—Season with salt and pepper. Place meat fat side up on rack in open roasting pan. Insert meat thermometer. Do not add water. Do not cover. Do not baste. Roast in slow to moderate oven (300 to 350 degrees F.) to desired degree of doneness.

LESS TENDER CUTS AND MOIST HEAT METHODS

. . . Again, refer to the chart for meat cuts to prepare by these methods:

1. *To braise*—Brown meat on all sides in fat in heavy utensil. Season with salt and pepper. Add a small amount of liquid, if necessary. Cover tightly and cook at low temperature until done.

2. *To cook in liquid*—Brown meat on all sides in its own fat or lard. Season with salt and pepper. Cover with liquid, cover kettle and cook below boiling point until tender. Add vegetables just long enough before serving to allow them to be cooked.

WHAT METHOD FOR WHAT CUT?

Cut	Grade	Cooking Method				
		Broil or pan-broil	Pan-fry	Roast	Braise	Cook in liquid
Standing or rolled rib roast	All grades			×		
Rump roast	Prime, Choice, Good			×	×	
	Standard				×	
Porterhouse, T-bone, rib, club, tenderloin (filet mignon), tip, sirloin steaks	Prime, Choice, Good	×	(Thin) ×			
	Standard	×	×		×	
Top round steak	Prime, Choice	×	×		×	
	Good, Standard		×		×	
Bottom round steak	Prime, Choice		×		×	
	Good, Standard				×	
Chuck, arm, blade roasts and steaks	Prime, Choice, Good			×	×	
	Standard				×	
Flank steak, plate, brisket, short ribs, cross-cut shanks, cubed stew meat	All grades				×	×
Neck, shank, heel of round, corned beef	All grades					×
Ground beef patties	All grades	×	×			
Tenderized steak (Cube steak)	All grades	×	×		×	

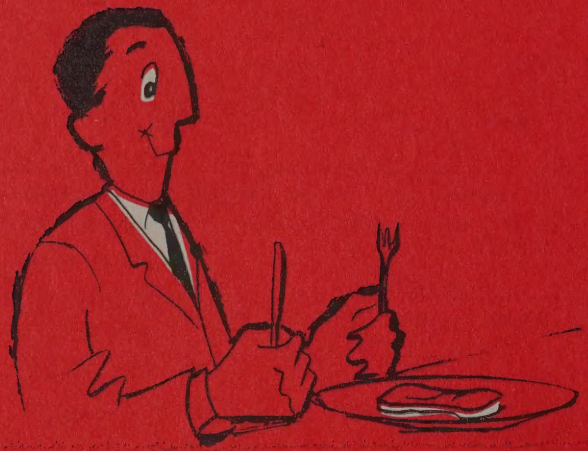
This is the first of a series of publications on meats from the Cooperative Extension Service, Iowa State University. Subsequent publications will include "A Shopper's Guide to Pork" and "A Shopper's Guide to Lamb."

Other food and nutrition publications from Cooperative Extension Service, Iowa State University, include:

Pm-310 How-to's for Barbecues

HE 43 Look to Your Skillet Skills

Single copies of the above publications are available from Publications Distribution, Morrill Hall, Iowa State University, Ames, Iowa.



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